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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,584	09/21/2001	Douglas C. Watson	10636-003-999	5442

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EXAMINER

KIM, PETER B

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,584

Applicant(s)

WATSON ET AL.

Examiner

Peter B. Kim

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 122001.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the three flexible members attached to three moveable members must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: on page 12, lines 30-31, "a movable base 312, support members 330, 332" are disclosed; however, line 32 indicates that three movable bases are moved in z direction. It is not clear how a moveable base 312 became three movable bases.

Appropriate correction is required.

Claim Objections

Claim 1 is objected to because of the following informalities: "at least one first degree" seems redundant. "at least one degree" seems sufficient. It is unclear how an actuator is "connected" in "said first degree of freedom." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10, 26 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Adjusting of the table position in a fourth, fifth and sixth degree of freedom by adjusting only in the fourth degree of freedom the positions of firsts, second and third supporting base is not adequately described in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 24, the structural relationship between the three flexible members and the three moveable members are not clear.

The remaining claims, not specifically mentioned, are rejected for incorporating the defects from the base claim by dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 10-23, and 26-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Horikawa et al. (5,991,005).

Horikawa discloses a semiconductor processing system (10) comprising a source of radiant energy (EL), a reticle (R), a wafer or a workpiece (W), a positioning system (20) comprising a frame (21), a table (24) to be positioned with respect to the frame, a first flexible member (in Claim 1), connection means (in Claims 11 and 12) or support member (in Claim 16) (36) that connects the table to a first movable base (23), the first flexible member being resistant to movement in at least one degree of freedom, and flexible in other degrees of freedom (col. 7, lines 45-51), a support structure or a platform (22) that connects the first movable base to the frame; and at least one actuator (34 a-f) connected to the first movable base in the first degree of freedom with respect to the frame (col. 10, line 61 – col. 11, line 2). Horikawa discloses a first actuator means (30) for adjusting the position of the movable member with respect to the frame and second actuator means (34 a-f) for adjusting the position of the table with respect to the frame. Horikawa discloses means (PL) for directing radiant energy onto the workpiece, a first means (30) for adjusting the workpiece with respect to the platform in at least one degree of freedom and a second means (31) for adjusting the position of the workpiece with respect to the platform in additional degrees of freedom. Horikawa discloses the actuators to driving the table in the directions indicated in the claims (col. 10, lines 61-67). The first movable base comprises a magnet and the actuator comprises one or more coil assemblies (col. 9, lines 30-45).

Claims 1-7, 9-23 and 26-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Korenaga et al. (Korenaga) (6,570,645).

Korenaga discloses a semiconductor processing system (col. 1, lines 8-15) comprising a source of radiant energy, a reticle, a wafer or a workpiece, a positioning system (Fig. 8) comprising a frame (502), a table (501) to be positioned with respect to the frame, a first flexible member (in Claim 1), connection means (in Claims 11 and 12) or support member (in Claim 16) (581) that connects the table to a first movable base (561), the first flexible member, which is a spring, being resistant to movement in at least one degree of freedom, and flexible in other degrees of freedom (col. 24, lines 36-45), a support structure or a platform (512X) that connects the first movable base to the frame; and at least one actuator (512X) connected to the first movable base in the first degree of freedom with respect to the frame. Korenaga discloses a first actuator means (511Y, 512Y) for adjusting the position of the movable member with respect to the frame and second actuator means (512X) for adjusting the position of the table with respect to the frame. Korenaga discloses means for directing radiant energy onto the workpiece (inherent in col. 1, lines 8-15), a first means (511Y, 512Y) for adjusting the workpiece with respect to the platform in at least one degree of freedom and a second means (512X) for adjusting the position of the workpiece with respect to the platform in additional degrees of freedom. Korenaga discloses the actuators to driving the table in the directions indicated in the claims (Fig. 10). The first movable base comprises a magnet and the actuator comprises one or more coil assemblies (col. 22, lines 1-47). Korenaga also discloses the support structure comprising bellows (col. 21, line 63 – col. 22, line 21).

Allowable Subject Matter

Claims 24 and 25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Kim whose telephone number is (703) 305-0105. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703 308 2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9318 for regular communications and 703 872 9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306 3431.



Peter B. Kim
Patent Examiner
July 2, 2003